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STS OPS FLIGHT PRD, VOLUME I PRD/PSP/OR/OD

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STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 1031 - INDEX

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

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STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

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SECTION 1060 - KEY TECHNICAL PERSONNEL

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 [PRD] DATABASE RECORD: 20915 REQUIREMENT STATUS: APPROVED R FLT-IDOCUMENT ID: APPROVAL DATE: 03/12/01 INITIAL DATE: 02/23/90

ITEM NUMBER: DATE LAST CHANGED: 07/03/02 TIME LAST CHANGED: 08:04:37 SECTION: 1060

MSFC REQUESTER: INFO TEST CODE:

TRACKING NO. F002-4 F007-1 F01-03-1

1. NAME: NELDA HILEY (R&R MANAGER)
2. ORGANIZATION: FD43
3. TITLE/OFFICE: FLIGHT PROJECTS DIRECTORATE

4. BUSINESS ADDR: Marshall Space Flight Center, Alabama 35812

5. TELEPHONE NO.: (256) 544-5774 (256) 544-2107 6. FACSIMILE:

______ PAGE SEQUENCE NUMBER: 3 FLS1060.001 REF UDS R G/A

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2000 - TEST REQUIREMENTS/SUPPORT PLANS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 [PRD] DATABASE RECORD: 530426 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 06/13/95 INITIAL DATE: 06/13/95 ITEM NUMBER: HT49G DATE LAST CHANGED: 11/19/02 TIME LAST CHANGED: 15:53:26 SECTION: 2000

MSFC
LATROT STSALL
F506-4 JSC REQUESTER: TEST CODE:

TRACKING NO.

1. DESCRIPTION: SN UPS/DQM REQUIREMENTS

The SN is required to have the capability of transmitting UPD/DQM information in 4800 bit NASCOM blocks of non-secure data receive for all forward and return links to the MCC, and HOSC. The UPD/DQM is a once per 5 second message (per vehicle) containing forward and return links status of the WSC.

Reference JSC/GSFC ICD JSC No. 11534 for details and related information.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 06/20/95

______ PAGE SEQUENCE NUMBER: 4 FLS2000.001 REF UDS R G/A

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2100 - METRIC DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 [PRD] DATABASE RECORD: 380518 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 05/24/94 INITIAL DATE: 03/25/88 ITEM NUMBER: H71E DATE LAST CHANGED: 07/19/02 TIME LAST CHANGED: 11:49:17 SECTION: 2100

MSFC ER REQUESTER: SUBREQUESTER:

ER TEST CODE: LAUNCH STSALL

F008-1 F405-5 TRACKING NO.

1. DESCRIPTION: SRB/C-BAND REQUIREMENTS

MSFC requires land based radar to track SRBs from SRB/ET separation to LOS. See 2100, T72E, DBR 382230.

SUPPLIER: ER AGENCY: 45 RANS/DOS (E - 45TH SPACE WING)

SUBSUPPLIER:

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 08/10/94

______ PAGE SEQUENCE NUMBER: 5 FLS2100.001

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 [PRD] DATABASE RECORD: 8402 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 11/28/01 INITIAL DATE: 01/12/87 ITEM NUMBER: H1.5GT SECTION: 2200 DATE LAST CHANGED: 11/22/02 TIME LAST CHANGED: 11:49:22

REQUESTER: MSFC
SUBREQUESTER: MDRC
TEST CODE: ALPHSE LAUNCH MSYSEN STSALL

F007-1 F109-7 F111-1 F402-1 F507-4 TRACKING NO.

> F702-1 F801-2

1. DESCRIPTION: MSFC RT OD TLM REQUIREMENT

MSFC requires all available real-time OD data, provided by JSC output via GSFC from Launch -24 hours to Landing.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)
SUBSUPPLIER: GSFC450.3 MIL WLP

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/20/01

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER

SUPPLIER COMMITMENT: WILCO SEE RESPONSE RESPONSE DATE: 11/28/01

RESPONSE: If Payload Contingency Communications (PCC) is required

for classified payloads; JSC will inhibit the OD output (TLM & Voice) to all external centers. Upon completion of the PCC, centers may request a playback of the telemetry

data.

[PRD] DATABASE RECORD: 388727 REQUIREMENT STATUS: APPROVED R FLT-IDOCUMENT ID: APPROVAL DATE: 11/04/02 05/10/91 INITIAL DATE:

H4GT ITEM NUMBER: DATE LAST CHANGED: 03/21/03 TIME LAST CHANGED: 14:00:09 SECTION: 2200

REOUESTER:

REQUESTER: MSFC
TEST CODE: LAUNCH STSALL

______ PAGE SEQUENCE NUMBER: 6 REF UDS R G/A

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 388727

ITEM NUMBER: H4GT

TRACKING NO. F02-11-1 F105-7 F505-1 MS039

1. DESCRIPTION: GN/SN SSME DUMP OPS1 RECORDER #1/SSR #2 SSME PLAYBACK

MSFC requires OPS Recorder #1 or SSR #2 to record SSME 60 KBPS data for the time period T -330 seconds through MECO +600 seconds for subsequent dump to GN and playback to MSFC. Playback to MSFC should be all engines in a forward direction in NASCOM format at a 2:1 rate. The dumps and playback should be performed as early in the mission as possible. JSC is requested to retain this data on the onboard recorder/SSR until MSFC has validated the data. MSFC will process the data in near real-time and advise JSC within 1 hour of receipt of valid data.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)
SUBSUPPLIER: DSN GSFC/530 MIL

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 03/18/03

AGENCY: JSC/DV (JOHNSON SPACE CENTER SUPPLIER: JSC

SUBSUPPLIER: USH-443C

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/04/02

_____ REQUIREMENT STATUS: APPROVED R

[PRD] DATABASE RECORD: 376761 DOCUMENT ID: FLT-I APPROVAL DATE: 08/20/02 INITIAL DATE: 01/30/91

ITEM NUMBER: HK23GKST SECTION: 2200 DATE LAST CHANGED: 11/04/02 TIME LAST CHANGED: 13:48:35

KSC

REQUESTER: MSFC SUBREQUESTER: PH-M2

MSFC KSC
PH-M2 UB-E1
ALPHSE EORBIT STSALL TEST CODE:

F02-08-1 F02-08-1A F02-08-5 F101-6 F103-1 F302-10 F801-2 F801-3 FSRR3901 FSRR3902 FSRR8901 RSRR3901 TRACKING NO.

F908-2

1. DESCRIPTION: KSC/MSFC REALTIME TELEMETRY

KSC and MSFC require real time downlink OD PCM telemetry data from JSC.

______ PAGE SEQUENCE NUMBER: 7 REF UDS R G/A FLS2200.002

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 376761 ITEM NUMBER: HK23GKST

This data will be received at JSC from GN/SN/RTS supporting the mission. JSC will remote the data via NISN, to KSC via MILA and to

MIL is required to receive and serialize these data (HDR telemetry 192Kbps; or LDR telemetry, 96 Kbps, as received) for input to the LPS for all missions. Data will be displayed in real time on the LCC Control

Room consoles.

KSC Contacts: Jose Amador/UB-E1 321 867-3945

Debbie Awtonomow/PH-M2 321 861-3972 Dick Hartung/KSC/LPS/ 321 861-6572

MSFC Contacts: Gary Dempsey/UMS/NTI 256 544-5113

SUPPLIER: GSFC AGENCY: GSFC/450 (GODDARD SPACE FLIGHT CENTER)
SUBSUPPLIER: GSFC1135 MIL

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 08/20/02

RESPONSE TRACKING: Z103-1

SUPPLIER: KSC AGENCY: KSC/PH-B (KISUBSUPPLIER: GSFC/450 PH-K1-A AGENCY: KSC/PH-B (KENNEDY SPACE CENTER

SUPPLIER COMMITMENT: WILCO SEE RESPONSE RESPONSE DATE: 08/20/02

RESPONSE: S-Band PM/OI 192 and 96 Kb/s to LPS/CCMSS/CCMS data will

be furnished on assigned wideband lines for use in LCC

control rooms 1, 2, or 3.

ZR3901 ZR3902 ZR8902 ZR9901 RESPONSE TRACKING: ZR3501

SUPPLIER: 21 SOPS AGENCY: 501/5 SOPS) (

SUBSUPPLIER: 21SOPS/VOS

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 08/20/02

______ REF UDS R G/A FLS2200.003

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 376761 ITEM NUMBER: HK23GKST

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER

RESPONSE DATE: 08/20/02 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 9960 REQUIREMENT STATUS: APPROVED DOCUMENT ID: FLT-I APPROVAL DATE: 03/28/88 INITIAL DATE: 03/28/88 DATE LAST CHANGED: 07/19/02 ITEM NUMBER: H23.1K TIME LAST CHANGED: 14:13:06 SECTION: 2200

REQUESTER:

MSFC ALPHSE MIL REQUESTER: TEST CODE: STSALL

1. DESCRIPTION: MSFC REALTIME TELEMETRY

MSFC requires access to selected parameters via the KSC LPS Common Data Buffer for display in the HOSC. Transmission to MSFC will be via the HOSC FEP (Front End Processor) and direct KSC to MSFC circuit.

SUPPLIER: KSC AGENCY: TM-LLP-3 (B/E/G/L/M/N/R/T/U FOR KPRD-I ITEMS)

PZ-B2 SUBSUPPLIER:

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 03/28/88

RESPONSE: Selected parameters to MSFC/HOSC.

[PRD] DATABASE RECORD: 380172 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 02/18/97 INITIAL DATE: 01/14/86 ITEM NUMBER: H24G DATE LAST CHANGED: 07/03/02 SECTION: TIME LAST CHANGED: 08:04:59 2200

REQUESTER: MSFC SUBREQUESTER: F702-3

TEST CODE: LAUNCH STSALL

1. DESCRIPTION: SSME R/T DOWNLINKED DATA

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 380172

ITEM NUMBER: H24G

MSFC requires SSME data recorded during Ascent from the SSO S-Band FM link to Mila LOS.

SUPPLIER: GSFC AGENCY: GSFC/450 (GODDARD SPACE FLIGHT CENTER)

GSFC/530 MIL SUBSUPPLIER:

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 02/18/97

[PRD] DATABASE RECORD: 382075 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 08/21/03 INITIAL DATE: 02/07/90

ITEM NUMBER: HK25G SECTION: 2200 DATE LAST CHANGED: 04/21/04 TIME LAST CHANGED: 11:45:48

REQUESTER: MSFC KSC

SUBREQUESTER: I-PK-E3 ROC-OSB RPS/USK-669
TEST CODE: DATADS LATROT MIL MIL STSALL

F03-08-3 F04-04-1 F303-4 F408-4 F903-4 TRACKING NO.

MS164 RSRR5503

1. DESCRIPTION: SSME ONBOARD RECORDED DATA

All SSME data that is recorded onboard the SSO is required to be downlinked ASAP. This data downlinked via the SSO S-band FM link is to be recorded at the receiving GN stations. SSME data will be played back to KSC upon request. SSME dumps will be played back to MSFC ASAP on a routine basis.

NOTE: MIL and PDL to retain recorded SSME data on station for 21 days and during that time will be available for playback. Playbacks will be scheduled through the WSC Scheduling Office. After 21 days SSME tapes may be degaussed. Requests for data to be held beyond 21 days will be directed to the GSFC STDN Mission Manager (SMM) or Network Operations Manager (NOM).

TECHNICAL CONTACT: WSC Operations Supervisor (OS)(505) 527-7157

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

______ PAGE SEQUENCE NUMBER: 10 REF UDS R G/A

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SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 382075

ITEM NUMBER: HK25G

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 08/27/03

RESPONSE: Shipment of tape within 12 hours is dependent on air freight

schedules.

[PRD] DATABASE RECORD: 234662 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 05/15/95 INITIAL DATE: 05/10/91 GHT38G ITEM NUMBER: DATE LAST CHANGED: 04/21/04 SECTION: 2200 TIME LAST CHANGED: 11:55:59

REQUESTER: GSFC MSFC
TEST CODE: EORBIT STSALL
TRACKING NO. F04-04-1 F105-7 F505-1 MSFC JSC

1. DESCRIPTION: SN KU-BAND CHANNEL 2 REQUIREMENTS

The SN is required to have the capability to remote Ku-band Channel 2 data to MCC, GSFC, and MSFC via the Closed IONET circuit. In addition to Orbiter OD Dumps, data will include payload R/T or dump data.

SUPPLIER: GSFC AGENCY: GSFC/450 (GODDARD SPACE FLIGHT CENTER)
SUBSUPPLIER: GSFC/534

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 05/19/95

[PRD] DATABASE RECORD: 237506 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I

APPROVAL DATE: 05/15/95 INITIAL DATE: 05/10/91 ITEM NUMBER: GHT39G DATE LAST CHANGED: 04/21/04

TIME LAST CHANGED: 11:58:24 SECTION: 2200

REQUESTER: GSFC MSFC
TEST CODE: EORBIT STSALL
TRACKING NO. F04-04-1 F105-7 F505-1 MSFC JSC

1. DESCRIPTION: SN KU-BAND CHANNEL 3 REQUIREMENTS

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 237506

ITEM NUMBER: GHT39G

The SN is required to have the capability to remote Ku-band Channel 3 data to MCC, GSFC, and MSFC. Channel 3 bit rates within the bandwidth of the Closed IONET circuitry may be remoted. Channel 3 bit rates exceeding the Closed IONET circuitry bandwidth will be transmitted to MCC via the statistical mux.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

GSFC/530/534 GSFC/540 SUBSUPPLIER:

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 05/19/95

[PRD] DATABASE RECORD: 241151 REQUIREMENT STATUS: APPROVED R APPROVAL DATE: 11/04/02 INITIAL DATE: 03/28/88 DOCUMENT ID: FLT-I DATE LAST CHANGED: 03/21/03 ITEM NUMBER: H41GT

2200 TIME LAST CHANGED: 14:01:04 SECTION:

REQUESTER: MSFC
TEST CODE: LAEORB
TRACKING NO. F02-11-1 STSALL

1. DESCRIPTION: SN SSME DUMP SUPPORT REQUIREMENTS

The SN is required to receive, record and remote the following data, as applicable to MSFC. Remoting the data will be direct to MSFC via GSFC:

1. MSFC requires an OPS Recorder #1/SSR #2 SSME dump at 960 Kb/s SSME dump at 960 Kb/s thru TDRS with direct relay to MSFC via GSFC. JSC is requested to retain data on the SSO onboard OPS Recorder #1/SSR #2 until MSFC has validated data. MSFC will process the data in near real time and advise JSC (within one hour) of receipt of valid data. Pre-launch testing of data circuits for this requirement and data transmission is required. SSME dump data relayed to MSFC should be recorded at WSC with the tape being retained for 24 hours and degaussed if P/B is not required.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

______ PAGE SEQUENCE NUMBER: 12 REF UDS R G/A FLS2200.007

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SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 241151

ITEM NUMBER: H41GT

SUBSUPPLIER: GSFC/WSC/534

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 03/18/03

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER)

SUBSUPPLIER: USH-443N

SUPPLIER COMMITMENT: WILCO SEE RESPONSE RESPONSE DATE: 11/04/02

RESPONSE: JSC cannot quarantee that the OPS Recorder 31/SSR #2 SSME

dumps will always occur via TDRS. JSC will retain the option to dump SSME data to GN (MIL) as covered is Section 2200, Item H4G DBR 388727 and T29G DBR 392095.

[PRD] DATABASE RECORD: 242615 REQUIREMENT STATUS: APPROVED R APPROVAL DATE: 02/02/04 INITIAL DATE: 02/07/90 DOCUMENT ID: FLT-I ITEM NUMBER: H43GT DATE LAST CHANGED: 02/02/04 TIME LAST CHANGED: 15:42:41 SECTION: 2200

REOUESTER: MSFC

TEST CODE:

DATADS LAUNCH STSALL F02-11-1 F04-01-2 F04-02-1 F702-1 F903-4 TRACKING NO.

1. DESCRIPTION: OPS-2 RECORDER/SSR #1 DUMP TO MSFC

MSFC requires that the ascent phase OD through MET of 60 minutes from the OD SSR will be dumped to the ground and recorded. The data shall be played back to MSFC via the JSC/MSFC Playback OD back-feed/GSFC Closed IONET interface as soon as possible after the dump is completed.

In the event that the ascent OD data is dumped via TDRSS, the data should be received at MSFC in real-time.

JSC will be the source of all OD SSR dump playbacks to MSFC.

AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIG SUBSUPPLIER: DSN GSFC/534 GSFC/562

MIL

______ PAGE SEQUENCE NUMBER: 13 REF UDS R G/A FLS2200.008

CLASSIFICATION UNCLASSIFIED

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2200 - TELEMETRY DATA

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 242615

ITEM NUMBER: H43GT

SUPPLIER COMMITMENT: NOACK RESPONSE DATE: 02/02/04

AGENCY: JSC/DV (JOHNSON SPACE CENTER)

SUPPLIER: JSC SUBSUPPLIER: USH-443C

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 02/02/04

[PRD] DATABASE RECORD: 525304 REQUIREMENT STATUS: APPROVED R APPROVAL DATE: 11/28/01 DOCUMENT ID: FLT-I INITIAL DATE: 12/13/93

H54GT ITEM NUMBER: DATE LAST CHANGED: 11/19/02 SECTION: 2200 TIME LAST CHANGED: 15:53:26

REQUESTER: MSFC SUBREQUESTER: MDRC

TEST CODE:

ALPHSE MSYSEN STSALL F007-1 F01-08-2 F111-1 F402-1A FF312-2 TRACKING NO.

1. DESCRIPTION: MSFC OD Dump Playback

MSFC requires playback of all OD dump data from Launch to Landing.

NOTE: Flight PRD Vol. II Annexes will take precedence over this

requirement.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/20/01

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER

SUPPLIER COMMITMENT: WILCO SEE RESPONSE RESPONSE DATE: 11/28/01

RESPONSE: JSC will provide OD playback data on a best effort/non

interference bases.

______ PAGE SEQUENCE NUMBER: 14 REF UDS R G/A FLS2200.009

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2700 - COMMUNICATION

 PUBLICATION DATE:
 10/11/90
 REVISION:
 0000
 RUN DATE:
 06/30/04

 EMANDATE:
 348378
 REQUIREMENT STATUS:
 APPROVED R

 DOCUMENT ID:
 FLT-I
 APPROVAL DATE:
 04/20/92

 INITIAL DATE:
 11/13/91

 ITEM NUMBER:
 HT19G
 DATE LAST CHANGED:
 11/22/02

 SECTION:
 2700
 TIME LAST CHANGED:
 11:49:22

REQUESTER: MSFC JSC SUBREQUESTER: JSC/MT3 TVPLAN TEST CODE: EORBIT STSALL

TRACKING NO. F110-3 F111-2 F204-3

1. DESCRIPTION: TDRSS TELEVISION REQUIREMENTS

The WSC is required to receive, record and remote Orbiter real-time RT or PB downlinked TV to MCC. A full - transponder TV transmission circuit between the WSC and MCC is required.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 04/22/92

[PRD] DATABASE RECORD: 349835 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 05/15/95
INITIAL DATE: 01/26/90
ITEM NUMBER: HT20G DATE LAST CHANGED: 11/19/02
SECTION: 2700 TIME LAST CHANGED: 15:53:26

REQUESTER: MSFC JSC TEST CODE: EORBIT STSALL

TRACKING NO. F505-2

1. DESCRIPTION: TDRSS DATA COMMUNICATIONS REQUIREMENTS

The WSC is required to have the capability of remoting Ku-band Channel 2, up to 2 MBS and channel 3 data, up to 48 MBS, to MCC and MSFC via a DOMSAT channel.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 09/05/95

FLS2700.001 PAGE SEQUENCE NUMBER: 15 REF UDS R G/A CLASSIFICATION UNCLASSIFIED

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2700 - COMMUNICATION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 [PRD] DATABASE RECORD: 349767 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 03/30/98 INITIAL DATE: 09/21/89 ITEM NUMBER: GHT24G DATE LAST CHANGED: 11/19/02 TIME LAST CHANGED: 15:53:26 SECTION: 2700

MSFC REQUESTER: JSC

GSFC M
ALPHSE STSALL
F204-3 F803-5 TEST CODE: TRACKING NO.

1. DESCRIPTION: JSC AND MSFC STAT MUX

JSC and MSFC require a Statistical Multiplexer system to operate on the 50 MBPS WSC to MSFC and JSC full transponder circuit.

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 03/30/98

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2730 - VOICE NETWORK TRANSMISSION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

[PRD] DATABASE RECORD: 266278 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 09/27/02

INITIAL DATE: 03/29/88

H7G ITEM NUMBER: DATE LAST CHANGED: 01/20/04 2730 TIME LAST CHANGED: 10:21:29 SECTION:

REQUESTER:

MSFC
ALPHSE STSALL
F02-09-5 TEST CODE:

TRACKING NO.

1. DESCRIPTION: VOICE LINES

Provide the following voice service as outlined below:

TYPE OF

REF SERVICE FROM TO REMARKS -------------

H7 DUPLEX GSFC MSFC

4 CKTS

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/16/03

[PRD] DATABASE RECORD: 272846 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: APPROVAL DATE: 09/27/02 FLT-I

10/28/87 INITIAL DATE: H8GT ITEM NUMBER: DATE LAST CHANGED: 01/20/04

TIME LAST CHANGED: 10:22:01 SECTION: 2730

REQUESTER: MSFC
SUBREQUESTER: JSC/MT3
TEST CODE: ALPHSE

STSALL TVPLAN

TRACKING NO. F02-09-5

1. DESCRIPTION: VOICE LINES

Provide the following voice service as outlined below:

TYPES OF

REF FROM SERVICE TO REMARKS

T1 MSFC DUPLEX JSC

4 CKTS

FLS2730.001

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2730 - VOICE NETWORK TRANSMISSION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 272846

ITEM NUMBER: H8GT

T2 DUPLEX JSC MSFC

19 CKTS

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/06/03

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 09/27/02

______ PAGE SEQUENCE NUMBER: 18

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2734 - VIDEO/DATA NETWORK TRANSMISSION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04 ______ [PRD] DATABASE RECORD: 513735 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 08/20/03 INITIAL DATE: 11/14/91

HT26EGKX ITEM NUMBER: DATE LAST CHANGED: 01/20/04 2734 TIME LAST CHANGED: 10:18:05 SECTION:

JSC

REQUESTER: MSFC SUBREQUESTER: F111-3

EORBIT STSALL TVPLAN TEST CODE:

F03-08-2 F102-3 F103-2 F111-3 F111-7 TRACKING NO.

F206-10 F206-3 F112-1 F206-5 F207-7

F801-2 F802-1

TELEVISION TRANSPONDER SUPPORT FOR SHUTTLE FLIGHTS 1. DESCRIPTION:

Control and scheduling of Satellite AMC-9 Transponder 5 and Transponder 9 are a function of NISN. During Shuttle flights, operational control of these transponders is delegated to Houston TV who acts on behalf of the Flight Director.

General use of these transponders is as follows:

LAUNCH

Transponder 5 - multiplexed video from KSC to support operational needs of the Marshall ICE team and the JSC MER.

Transponder 9 - support of launch coverage for Public Affairs Office (PAO) and operations as NASA Select.

ON-ORBIT:

Transponder 5 - support of Shuttle TDRSS wideband data and television downlink.

Transponder 9 - support of PAO as NASA Select. Also used for transmission of the S-Band downlinked video from MIL to JSC. JSC.

LANDING:

Transponder 5 - support of operational television requirements of the MER for post-flight documentation of Orbiter condition.

______ PAGE SEQUENCE NUMBER: 19 FLS2734.001 REF UDS R 228

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2734 - VIDEO/DATA NETWORK TRANSMISSION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 513735 ITEM NUMBER: HT26EGKX

Transponder 9 - support of operational and PAO coverage of landing from acquisition through crew egress.

TRANSPONDER AUDIO CHANNELS:

Transponder 9 - has two audio channels one for program audio and the other for timing data associated with tape replays.

Transponder 5 - has one audio channel for timing data during tape replays.

TRANSPONER UPLINK/DOWNLINK CAPABILITIES

SITE	TRANSPO	NDER 9	TRANSPO	NDER 5
	UPLINK/	DOWNLINK	UPLINK/	DOWNLINK
KSC/MILA	X	X	X	X
MSFC	X	X	X	X
JSC	X	X	X	X
GSFC	X	X		X
WSC	X	X	X	X
DFRC	X	X		X

NOTE: 1. Depending on flight real-time requirements and PAO special events, priorities and configurations may change and are to be coordinated through Houston TV and GSFC NISN. Generally, transponder 9 will be used for "public access" and will normally carry NASA Select television. Transponder 5 is designated for opperational use.

REF: LLS 2734 HT33EG 514040 FLS 2700 T34G 520565

AGENCY: 45 RANS/DOS (E - 45TH SPACE WING SUPPLIER: ER

SUBSUPPLIER: WR

SUPPLIER COMMITMENT: NOACK RESPONSE DATE: 08/20/03

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

______ PAGE SEQUENCE NUMBER: 20 REF UDS R 228

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2734 - VIDEO/DATA NETWORK TRANSMISSION

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 513735 ITEM NUMBER: HT26EGKX

SUPPLIER COMMITMENT: WILCO SEE RESPONSE RESPONSE DATE: 12/16/03

RESPONSE: This transponder is shared with Landsat project.

SUPPLIER: KSC AGENCY: KSC/PH-B (KENNEDY SPACE CENTER

SUPPLIER COMMITMENT: NOACK RESPONSE DATE: 08/20/03

SUPPLIER: DFRC AGENCY: DFRC/OS (DRYDEN FLIGHT RESEARCH CENTER)

SUPPLIER COMMITMENT: NOACK RESPONSE DATE: 08/20/03

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

[PRD] DATABASE RECORD: 290507 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 10/20/03

INITIAL DATE: 01/17/90 ITEM NUMBER: DGHT12.1T DATE LAST CHANGED: 10/20/03

TIME LAST CHANGED: 12:28:30 SECTION: 2750

REQUESTER: DDMS GSFC MSFC

JSC

CKT12 DDMS EAFB ER
LATROT STSALL WSSH TEST CODE: CKT12

F02-06-2 F03-05-1 F03-10-2 F203-8 F209-6 TRACKING NO.

F804-1

1. DESCRIPTION: FLIGHT DIRECTOR (FD)

RESPONSIBLE AGENCY: JSC

REF TEST CODE CAP NOTE TERMINATION LOCATION _____ MCC for distribution Т1 Т Т 1,2 Extend to KSC Т2 G3 M Extend to GSFC Extend to MSFC H4 M T5 M 1,2 Extend to DFRC

NOTE: 1. This loop also contained in L&L PRD.

REF: GTK79.1T LLS 2750 DBR 283982

2. Configure for talk at Launch and Landing.

AGENCY: JSC/DV (JOHNSON SPACE CENTER SUPPLIER: JSC)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 10/20/03

[PRD] DATABASE RECORD: 388962 REQUIREMENT STATUS: APPROVED R

APPROVAL DATE: 05/24/02 INITIAL DATE: 09/26/91 DOCUMENT ID: FLT-I

ITEM NUMBER: DEHKT12.6K DATE LAST CHANGED: 11/12/02

SECTION: TIME LAST CHANGED: 14:38:14 2750

REQUESTER: DDMS ER MSFC

> KSC JSC

SUBREQUESTER: PK-D2

EMCC TEST CODE: CKT12 ER LATROT

STSALL

F02-06-2 F109-6 F110-1 F208-3 F302-8 TRACKING NO.

RSRR5502

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 388962 ITEM NUMBER: DEHKT12.6K

1. DESCRIPTION: FLIGHT DIRECTOR (FD)

RESPONSIBLE AGENCY: KSC

REF			TERMINATION LOCATION
 Т1			CDSC for distribution
E2	Т	1	CDSC extend to CCAFS X-Y Bldg.
			LCC1/3
Т3	Т		LAUNCH DIRECTOR, CON AA5
T4	T		NASA TEST DIRECTOR, CON AB5
T5	T		LANDING/RECOVERY DIRECTOR, CON AB8
K5.1		2	•
K5.2	M	2	BACKUP, CONS 0156/0656 A1,A2,A3 & A7
K5.3	M		CONSOLE AA1
			I GG1 / 2 OGD
			LCC1/3 OSR
Т6	M		DD, SS OPS, CON A4
T7			•
T8			ORBITER, CON A10
T9	M		JSC POSITION, CON A7
			LCC1/3 OMR
**1.0			WAS DEPENDED SON AS
K10 H11			KSC DIRECTOR, CON A5
D12	M		MSFC DIRECTOR, CON A6
DIZ	M		DDMS, CON A9 & A10
			LCC2
K13	M		INTEG CONS 0231/1455 A1, A2 & A3
K14	M	2	BACKUP CONS 0232/1456 A1,A2 & A3

NOTE: 1. When required this circuit will be activated for EMCC support. REF: T1K FLS 3020 DBR 520264 T1.1EK FLS 3020 DBR 520265

STS OPS FLIGHT PRD, VOLUME I PROGRAM REOUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 388962 ITEM NUMBER: DEHKT12.6K

T14EGKX FLS 2730 DBR 520260

NOTE 2: TALK CAPABILITY REQUIRED WHEN EMCC IS ACTIVATED.

NOTE 3: REQUIRED UPON ACTIVATION OF EMCC

TECH CONTACT: KSC R. HARRISON/PK-D2/407 861-3958

AGENCY: KSC/PH-B (KENNEDY SPACE CENTER

SUPPLIER: KSC AGENCY SUBSUPPLIER: TA-B2 USK-102

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 06/13/02

RESPONSE TRACKING: ZFR5202 ZFR5504

[PRD] DATABASE RECORD: 279239 REQUIREMENT STATUS: APPROVED R APPROVAL DATE: 05/24/02 DOCUMENT ID: FLT-I 10/24/84 INITIAL DATE:

ITEM NUMBER: HT16.1T DATE LAST CHANGED: 02/12/04 SECTION: 2750 TIME LAST CHANGED: 11:29:46

MSFC ALPHSE JSC REOUESTER:

FULL-TIME STSALL CKT16 TEST CODE:

TRACKING NO. F02-06-2 F203-7

1. DESCRIPTION: HOSC ORDER WIRE (HOSC O/W)

RESPONSIBLE AGENCY: JSC

REF TEST CODE CAP NOTE TERMINATION LOCATION ---Т T1MCC distribution Т Н2 Extend to MSFC

AGENCY: JSC/DV (JOHNSON SPACE CENTER SUPPLIER: JSC

RESPONSE DATE: 05/24/02 SUPPLIER COMMITMENT: WILCO

FLS2750.003 PAGE SEOUENCE NUMBER: 24 REF UDS NR 225

CLASSIFICATION UNCLASSIFIED

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

[PRD] DATABASE RECORD: 276383 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 10/03/02

INITIAL DATE: 01/17/90 ITEM NUMBER: GHKTX45.1G DATE LAST CHANGED: 11/19/02

TIME LAST CHANGED: 15:53:25 SECTION: 2750

REQUESTER: GSFC KSC

MSFC DFRC JSC

30 SPW ALPHSE CKT45 TEST CODE: EAFB

EMCC ER MIL STSALL

TRACKING NO. F02-06-2 F203-8 F208-3 F301-1 F301-3

F310-2A F310-2 F804-1 F901-14 F308-2

1. DESCRIPTION: SITE COORDINATION (SITE COORD)

RESPONSIBLE AGENCY: GSFC

TEST CODE CAP NOTE TERMINATION LOCATION ___ _____ Т T1 GSFC for distribution Т2 Т Extend to JSC Т GSFC MSC Т3 T T4Extend to CCAS X-Y via CDSC G5 M Extend to KSC/CDSC for distribution Extend to MSFC Comm Bldg. 4207 for Dist. Нб M Т7 Т Extend to WSMR via WSC Т Extend to GN Т8 G9 Т Extend to WSC Т Extend to DFRC T10

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

RESPONSE DATE: 10/03/02 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 17643 REQUIREMENT STATUS: APPROVED DOCUMENT ID: FLT-I APPROVAL DATE: 02/10/89

INITIAL DATE: ITEM NUMBER: H45.6GH DATE LAST CHANGED: 11/19/02

TIME LAST CHANGED: 15:53:25 SECTION: 2750

MSFC REQUESTER:

SUBREQUESTER: MSFC/E032

ALPHSE CKT45 STSALL TEST CODE:

______ PAGE SEQUENCE NUMBER: 25

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 17643

ITEM NUMBER: H45.6GH

TRACKING NO. F901-14

1. DESCRIPTION: SITE COORDINATION (SITE COORD)

RESPONSIBLE AGENCY: MSFC

H2 M MSFC OPS, MSFC Data and COMM Control,

Bldg. 4663

TECHNICAL CONTACT: MSFC/FD43/NELDA HILEY/256 544-5774

GSFC/450/T.SOBCHAK/301 286-7813

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 02/15/89

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/18/90

[PRD] DATABASE RECORD: 319763 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 01/08/03

INITIAL DATE: 01/17/90
ITEM NUMBER: HKTY46.1T DATE LAST CHANGED: 02/12/04

SECTION: 2750 TIME LAST CHANGED: 13:17:50

REQUESTER: MSFC KSC JSC

NASA HQ

SUBREQUESTER: PZ-A3

TEST CODE: CKT46 EAFB LATROT STSALL

TRACKING NO. F03-01-1 F204-10 F908-1

1. DESCRIPTION: SPACE SHUTTLE PROGRAM OFFICE (SSPO)

RESPONSIBLE AGENCY: JSC

FLS2750.005 PAGE SEQUENCE NUMBER: 26 REF UDS NR 225

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 319763 ITEM NUMBER: HKTY46.1T

REF	TEST CODE	CAP	NOTE	TERMINATION LOCATION
Т1		T		MCC for distribution
Т2		Т		Extend to JSC MER
Т3		T		Extend to DFRC
Т4		T		Extend to GSFC
H5				Extend to MSFC
Кб		T		Extend to KSC

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 01/08/03

[PRD] DATABASE RECORD: 330185 REQUIREMENT STATUS: APPROVED APPROVAL DATE: 10/25/84 INITIAL DATE: 10/25/84 DOCUMENT ID: FLT-I ITEM NUMBER: H46.4H DATE LAST CHANGED: 09/03/02

SECTION: 2750 TIME LAST CHANGED: 08:16:41

REQUESTER: MSFC

TEST CODE: CKT46 LATROT STSALL

1. DESCRIPTION: SPACE SHUTTLE PROGRAM OFFICE (SSPO)

RESPONSIBLE AGENCY: MSFC

REF TEST CODE CAP NOTE TERMINATION LOCATION

н1 Bldg 4207 for distribution to HOSC

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER)

RESPONSE DATE: 10/25/84 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 289849 REQUIREMENT STATUS: APPROVED R

APPROVAL DATE: 11/19/91 DOCUMENT ID: FLT-IINITIAL DATE: 11/19/91 ITEM NUMBER: HT51.5H DATE LAST CHANGED: 02/12/04

TIME LAST CHANGED: 13:21:59 SECTION: 2750

JSC REQUESTER: MSFC

______ PAGE SEQUENCE NUMBER: 27 REF UDS NR 225

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 289849

ITEM NUMBER: HT51.5H

SUBREQUESTER: JSC/MT3 TVPLAN
TEST CODE: ALPHSE CKT51 FULL-TIME STSALL

TRACKING NO. F111-4 F302-9 RSRR145

1. DESCRIPTION: TELEVISION CONFERENCE (TV CONF)

RESPONSIBLE AGENCY: MSFC

TEST CODE CAP NOTE TERMINATION LOCATION REF _____ ___ T1T Term. in Bldg 4207, Rm 107, CDC of MSFC

1 EXTEND TO GE AMERICAN Н2 EARTH STATION

NOTE 1 - EXTEND CIRCUIT TO GE EARTH STATION VIA FOUR WIRE VOICE CIRCUIT TERMINATION ON A DESK OR WALL INSTRUMENT (WHICHEVER STATION MANAGER DESIRES) WITH A PUSH TO TALK SWITCH AND SPEAKER MUTING WHEN PTT SWITCH IS ACTIVATED.

AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER SUPPLIER: MSFC

RESPONSE DATE: 02/19/93 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 16069 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-IAPPROVAL DATE: 04/03/98 INITIAL DATE: 03/08/90 DATE LAST CHANGED: 02/12/04

ITEM NUMBER: GHT65G TIME LAST CHANGED: 13:22:59 SECTION: 2750

GSFC MSFC REQUESTER: JSC

JSC/DV SUBREQUESTER:

CKT65 FULL-TIME TEST CODE: ALPHSE STSALL

TRACKING NO. F404-1

1. DESCRIPTION: MDM COORD RESPONSIBLE AGENCY: GSFC

______ PAGE SEQUENCE NUMBER: 28

STS OPS FLIGHT PRD, VOLUME I
PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/
OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD)
PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 16069

ITEM NUMBER: GHT65G

REF	TEST CODE	CAP N	OTE	TERMINATION LOCATION
G1		T		Extend to WSC
Т2		T		Extend to JSC
Н3		T		Extend to MSFC (4207) for Distribution

TECHNICAL CONTACTS: MSFC/FD43/N.HILEY/256 544-5774

JSC/DV/K. JONES/281 483-7671

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

 ITEM NUMBER:
 H66.3T
 DATE LAST CHANGED:
 09/03/02

 SECTION:
 2750
 TIME LAST CHANGED:
 09:12:50

REQUESTER: MSFC

TEST CODE: ALPHSE CKT66 STSALL

TRACKING NO. F203-8 F203-8A

1. DESCRIPTION: STAFF ENGINEER

RESPONSIBLE AGENCY: MSFC

REF TEST CODE CAP NOTE TERMINATION LOCATION

T1 T MSFC FOR DISTRIBUTION

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 03/16/92

FLS2750.008 PAGE SEQUENCE NUMBER: 29 REF UDS NR 225

CLASSIFICATION UNCLASSIFIED

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

[PRD] DATABASE RECORD: 568093 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 11/19/02

INITIAL DATE:

ITEM NUMBER: HT150.3H DATE LAST CHANGED: 12/12/03

TIME LAST CHANGED: 11:44:13 SECTION: 2750

MSFC CKT150 STSALL F02-11-5 REQUESTER: JSC

TEST CODE: TRACKING NO.

1. DESCRIPTION: TN COORD

RESPONSIBLE AGENCY: MSFC

REF CAP TERMINATION LOCATION ---___ _____

MSFC LOCAL DISTRIBUTION

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER)

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/12/03

[PRD] DATABASE RECORD: 567701 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 11/14/02

INITIAL DATE:

DATE LAST CHANGED: 02/12/04 ITEM NUMBER: GHT157G TIME LAST CHANGED: 13:27:01 SECTION: 2750

REQUESTER: GSFC JSC MSFC

FULL-TIME STSALL TEST CODE:

ASSOCIATED DOC: ISS VOL-I TRACKING NO. F02-11-3

1. DESCRIPTION: NISN COMM COORD

Responsible Agency: GSFC

TERMINATION LOCATION REF CAP NOTE ____ ___ ___ ______ T/M 1 T/M 1 T/M 1 Т1 EXTEND TO JSC EXTEND TO MSFC H2 G3 DISTRIBUTION TO GSFC NISN

______ PAGE SEQUENCE NUMBER: 30 REF UDS NR 225

ITERNAL AREAS

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 567701 ITEM NUMBER: GHT157G

NOTE: 1. Orderwire between JSC OST, GSFC COMM Manager, and MSFC NISN Service Group for all NISN related voice and data issues.

REF: ISS VOL-I ITEM GHT8G SECTION 2750 DBR 561754

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/22/02

_____ [PRD] DATABASE RECORD: 557526 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 11/14/02

INITIAL DATE: 11/06/00 ITEM NUMBER: GHT157.1T DATE LAST CHANGED: 02/12/04 TIME LAST CHANGED: 13:27:33 SECTION: 2750

REQUESTER: GSFC M. TEST CODE: FULL-TIME STSALL MSFC JSC

ASSOCIATED DOC:

ISS VOL-I F011-1 TRACKING NO. F02-06-2 F02-11-3

1. DESCRIPTION: NISN COMM COORD

Responsible Agency: JSC

NOTE TERMINATION LOCATION REF CAP ___ ___ ____ _____ T/M1 T1MCC DISTRIBUTION

NOTE: 1. Orderwire between JSC OST, GSFC COMM MANAGER, and MSFC NISN Service Group for all NISN related voice and data issues.

REF: ISS VOL-I ITEM TH8.1GT SECTION ISO2750 DBR 557096

AGENCY: JSC/DV (JOHNSON SPACE CENTER SUPPLIER: JSC

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/14/02

______ PAGE SEQUENCE NUMBER: 31 REF UDS NR 225 FLS2750.010

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 557526 ITEM NUMBER: GHT157.1T

[PRD] DATABASE RECORD: 567703 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 11/14/02

INITIAL DATE:

ITEM NUMBER: GHT157.2H DATE LAST CHANGED: 02/12/04 SECTION: 2750 TIME LAST CHANGED: 13:29:10

JSC REQUESTER: MSFC

GSFC
FULL-TIME STSALL TEST CODE:

ASSOCIATED DOC: ISS VOL-I TRACKING NO. F01-11-3

1. DESCRIPTION: NISN COMM COORD

Responsible Agency: MSFC

REF	CAP	NOTE	TERMINATION LOCATION
Н1	T/M	1	DISTRIBUTION TO MSFC ENMC/RSEG
Н2	T/M	2	DISTRIBUTION TO MSFC HOSC

- NOTE: 1. Orderwire between JSC OST, GSFC COMM MGR, and MSFC NISN (ENMC) and Russian Services Engineering Group (RSEG) for all NISN related voice and data issues.
 - 2. Used for NISN voice and data communication issues between COMM MGR, JSC OST, MSFC IST, and others as required.

REF: ISS VOL-I ITEM GHT8.2H SECTION 2750 DBR 561755

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/21/02

[PRD] DATABASE RECORD: 558795 REQUIREMENT STATUS: APPROVED R DOCUMENT ID: FLT-I APPROVAL DATE: 11/14/02 INITIAL DATE: 03/29/01 DATE LAST CHANGED: 02/12/04 ITEM NUMBER: GHT158G

______ PAGE SEQUENCE NUMBER: 32 REF UDS NR 225

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 558795

ITEM NUMBER: GHT158G

2750 SECTION: TIME LAST CHANGED: 13:29:39

REQUESTER: GSFC
TEST CODE: FULL-TIME STSALL MSFC JSC

ASSOCIATED DOC: ISS VOL-I TRACKING NO. F01-03-2 F02-11-3

1. DESCRIPTION: WSC PLAYBACK COORD

RESPONSIBLE AGENCY: GSFC

REF	CAP	NOTE	TERMINATION LOCATION
T1	T/M	1	EXTEND TO JSC
H2	T/M	1	EXTEND TO MSFC
G3	T/M	1	EXTEND TO WSC

NOTE: This circuit will be used for all Shuttle and Station Playbacks.

REF: ISS VOL-I ITEM GHT13G SECTION 2750 DBR 558796

SUPPLIER: GSFC AGENCY: GSFC/450 (GODDARD SPACE FLIGHT CENTER)
SUBSUPPLIER: WSC

SUBSUPPLIER: WSC

FLS2750.012

RESPONSE DATE: 11/22/02 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 567706 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 11/14/02

INITIAL DATE:

DATE LAST CHANGED: 02/12/04 ITEM NUMBER: GHT158.1T TIME LAST CHANGED: 13:30:06 SECTION: 2750

GSFC MSFC REOUESTER: JSC

FULL-TIME STSALL TEST CODE:

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 567706 ITEM NUMBER: GHT158.1T

ASSOCIATED DOC: ISS VOL-I TRACKING NO. S02-11-1

1. DESCRIPTION: WSC PLAYBACK COORD

RESPONSIBLE AGENCY: JSC

CAP REF NOTE TERMINATION LACTION ____ ___ ___ _____ T/M 1 T1TELCOM CONSOLES

NOTE: 1. THIS CIRCUIT WILL BE USED FOR ALL SHUTTLE AND STATION

PLAYBACKS.

REF: ISS VOL-I ITEM GHT13.1T SECTION 2750 DBR 561724

SUPPLIER: JSC AGENCY: JSC/DV (JOHNSON SPACE CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/14/02

[PRD] DATABASE RECORD: 567707 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-IAPPROVAL DATE: 11/14/02

INITIAL DATE:

ITEM NUMBER: GHT158.2H DATE LAST CHANGED: 02/12/04 TIME LAST CHANGED: 13:30:27 SECTION: 2750

GSFC FULL-TIME REQUESTER: MSFC JSC

TEST CODE: STSALL

ASSOCIATED DOC: ISS VOL-I TRACKING NO. S02-11-1

1. DESCRIPTION: WSC PLAYBACK COORD

RESPONSIBLE AGENCY: MSFC

REF NOTE CAP TERMINATION LOCATION ----1 Н1 T/MMSFC LOCAL DISTRIBUTION

______ PAGE SEQUENCE NUMBER: 34 FLS2750.013 REF UDS NR 225

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

PUBLICATION DATE: 10/11/90 REVISION: 0000 RUN DATE: 06/30/04

CONTINUED

[PRD] DATABASE RECORD: 567707 ITEM NUMBER: GHT158.2H

NOTE: 1.THIS CIRCUIT WILL BE USED FOR ALL SHUTTLE AND STATION

PLAYBACK.

REF: ISS VOL-II ITEM GHT13.2H SECTION 2750 DBR 561725

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 11/21/02

[PRD] DATABASE RECORD: 563578 REQUIREMENT STATUS: APPROVED R FLT-IDOCUMENT ID: APPROVAL DATE: 07/25/02

INITIAL DATE:

ITEM NUMBER: GH161G DATE LAST CHANGED: 02/12/04 TIME LAST CHANGED: 13:31:38 SECTION: 2750

REQUESTER:

GSFC MSFC
CKT161 FULL-TIME STSALL TEST CODE:

1. DESCRIPTION: GSFC/MSFC COORD

RESPONSIBLE AGENCY: GSFC

CAP REF NOTE TERMINATION LOCATION Extend to MSFC H1Т т G2 Extend to KSC/CDSC G3 Т Extend to WSC Т GSFC Local Distribution

SUPPLIER: GSFC AGENCY: GSFC/451 (GODDARD SPACE FLIGHT CENTER)

RESPONSE DATE: 01/14/03 SUPPLIER COMMITMENT: WILCO

[PRD] DATABASE RECORD: 563579 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 07/25/02

INITIAL DATE:

DATE LAST CHANGED: 02/12/04 ITEM NUMBER: GH161.1H TIME LAST CHANGED: 13:31:59 SECTION: 2750

MSFC GSFC REOUESTER:

CKT161 FULL-TIME STSALL TEST CODE:

STS OPS FLIGHT PRD, VOLUME I PROGRAM REQUIREMENTS DOCUMENT/PROGRAM SUPPORT PLAN/ OPERATIONS REQUIREMENT/OPERATIONS DIRECTIVE (PRD/PSP/OR/OD) PROGRAM NUMBER: 20000

SECTION 2750 - VOICE TERMINATIONS

RUN DATE: 06/30/04 PUBLICATION DATE: 10/11/90 REVISION: 0000

CONTINUED

[PRD] DATABASE RECORD: 563579 ITEM NUMBER: GH161.1H

1. DESCRIPTION: GSFC/MSFC COORD

RESPONSIBLE AGENCY: MSFC

REF CAP NOTE TERMINATION LOCATION

Extend for MSFC Distribution Н1 Т

SUPPLIER: MSFC AGENCY: MSFC/FD43 (MARSHALL SPACE FLIGHT CENTER

SUPPLIER COMMITMENT: WILCO RESPONSE DATE: 12/12/03

[PRD] DATABASE RECORD: 563580 REQUIREMENT STATUS: APPROVED R

DOCUMENT ID: FLT-I APPROVAL DATE: 07/25/02

INITIAL DATE:

ITEM NUMBER: GH161.2K DATE LAST CHANGED: 02/12/04 TIME LAST CHANGED: 13:32:40 SECTION: 2750

MSFC REOUESTER:

GSFC MSFC
CKT161 FULL-TIME STSALL TEST CODE:

1. DESCRIPTION: GSFC/MSFC COORD

RESPONSIBLE AGENCY: KSC/CDSC

REF CAP NOTE TERMINATION LOCATION

G1 Т Extend to MIL

SUPPLIER: KSC AGENCY: KSC/PH-B (KENNEDY SPACE CENTER

SUPPLIER COMMITMENT: NOACK RESPONSE DATE: 07/25/02

REPORT BY: FORM=06 DOC=FLT-I REQ= H APV= APP P1030=N